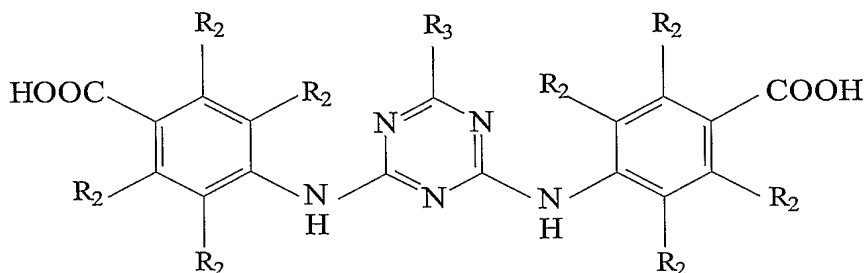


We claim:

1. A bioactive composition comprising:

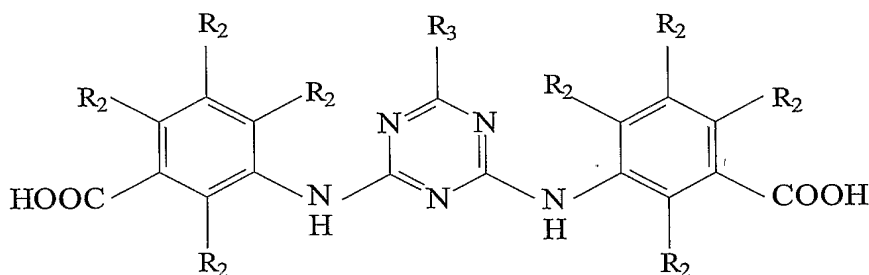
a bioactive compound, and

a triazine compound comprising:



5

or



wherein each  $R_2$  is independently selected from any electron donating group, electron withdrawing group and electron neutral group; and

10

$R_3$  is selected from the group consisting of substituted heteroaromatic rings, unsubstituted heteroaromatic rings, substituted heterocyclic rings, and unsubstituted heterocyclic rings, that are linked to the triazine group through a nitrogen atom within a ring of  $R_3$ ,

and proton tautomers and salts thereof.

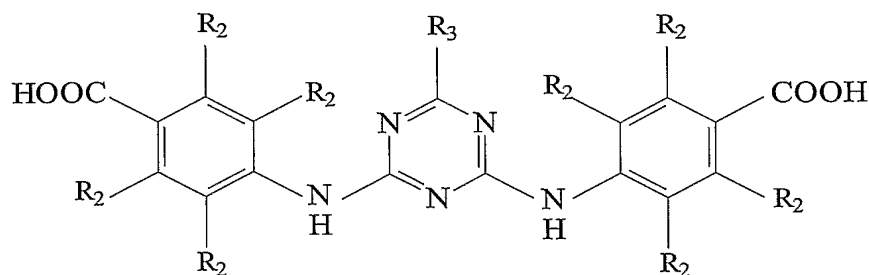
15

2. A bioactive composition according to claim 1, wherein each  $R_2$  is independently selected from the group consisting of hydrogen, an unsubstituted alkyl group, or an alkyl group substituted with a hydroxy, ether, ester, sulfonate, or halide functional group.

20

3. A bioactive composition according to claim 1, wherein  $R_3$  comprises a heteroaromatic ring derived from the group consisting of pyridine, pyridazine, pyrimidine, pyrazine, imidazole, oxazole, isoxazole, thiazole, oxadiazole, thiadiazole, pyrazole, triazole, triazine, quinoline, and isoquinoline.

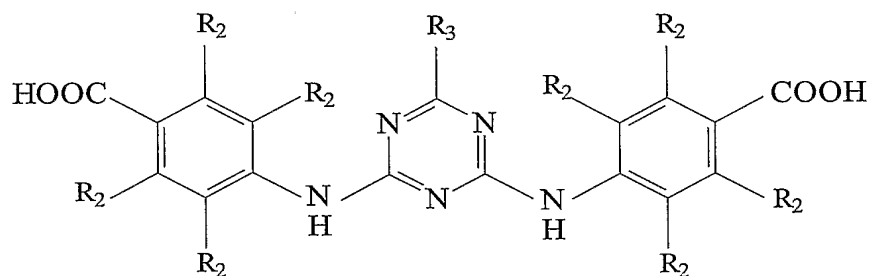
4. A bioactive composition according to claim 3, wherein R<sub>3</sub> comprises a heteroaromatic ring derived from a pyridine or imidazole.
5. A bioactive composition according to claim 4, wherein R<sub>3</sub> is selected from the group consisting of pyridinium-1-yl, 4-(dimethylamino)pyridium-1-yl, 3-methylimidazolium-1-yl, 4-(pyrrolidin-1-yl)pyridium-1-yl, 4-isopropylpyridinium-1-yl, 4-[(2-hydroxyethyl)methylamino]pyridinium-1-yl, 4-(3-hydroxypropyl)pyridinium-1-yl, 4-methylpyridinium-1-yl, quinolinium-1-yl, 4-*tert*-butylpyridinium-1-yl, and 4-(2-sulfoethyl)pyridinium-1-yl.
6. A bioactive composition according to claim 1 further comprising water.
7. A bioactive composition according to claim 6 wherein the bioactive compound, the triazine compound, and the water are substantially uniformly dispersed.
8. A bioactive composition according to claim 7 containing substantially no undissolved bioactive compound.
9. A bioactive composition according to claim 1 wherein the bioactive compound is a drug.
10. A bioactive composition according to claim 1, wherein the triazine compound is zwitterionic.
11. A bioactive composition according to claim 6, comprising a chromonic M or N phase.
12. A bioactive composition according to claim 1 wherein the triazine compound comprises:



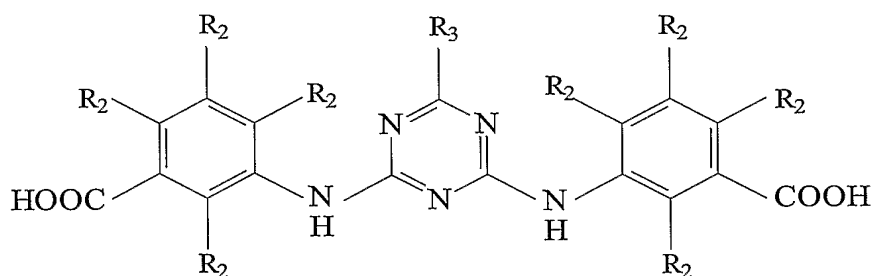
and proton tautomers and salts thereof.

13. A bioactive composition according to claim 12, wherein each R<sub>2</sub> is independently selected from the group consisting of hydrogen, an unsubstituted alkyl group, or an alkyl group substituted with a hydroxy, ether, ester, sulfonate, or halide functional group.

14. A bioactive composition according to claim 12, wherein  $R_3$  comprises a heteroaromatic ring selected from the group consisting of pyridine, pyridazine, pyrimidine, pyrazine, imidazole, oxazole, isoxazole, thiazole, oxadiazole, thiadiazole, pyrazole, triazole, triazine, quinoline, and isoquinoline.
15. A bioactive composition according to claim 14, wherein  $R_3$  comprises a heteroaromatic ring derived from pyridine or imidazole.
16. A bioactive composition according to claim 15, wherein  $R_3$  is selected from the group consisting of pyridinium-1-yl, 4-(dimethylamino)pyridium-1-yl, 3-methylimidazolium-1-yl, 4-(pyrrolidin-1-yl)pyridium-1-yl, 4-isopropylpyridinium-1-yl, 4-[(2-hydroxyethyl)methylamino]pyridinium-1-yl, 4-(3-hydroxypropyl)pyridinium-1-yl, 4-methylpyridinium-1-yl, quinolinium-1-yl, 4-*tert*-butylpyridinium-1-yl, and 4-(2-sulfoethyl)pyridinium-1-yl.
17. A method for preparing a bioactive composition comprising:
- (a) providing a bioactive compound;
  - (b) providing a triazine compound comprising:



or



wherein each  $R_2$  is independently selected from any electron donating group, electron withdrawing group and electron neutral group; and  $R_3$  is selected from the group consisting of substituted heteroaromatic rings, unsubstituted heteroaromatic rings, substituted heterocyclic rings, and unsubstituted heterocyclic rings, that are linked to the triazine group through a

- nitrogen atom within a ring of R<sub>3</sub>,  
 and proton tautomers and salts thereof; and  
 (c) combining the bioactive compound, the triazine compound, and a solvent to form a  
 bioactive composition.

18. A method for preparing a bioactive composition according to claim 17, wherein the  
 solvent comprises water.

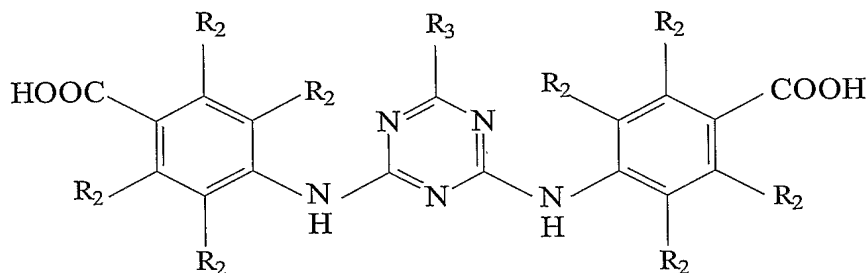
19. A method for preparing a bioactive composition according to claim 18, wherein the  
 triazine is dissolved in an aqueous solution prior to combining with the bioactive  
 compound.

20. A method for preparing a bioactive composition according to claim 19, wherein the  
 aqueous triazine solution exhibits a chromonic M or N phase.

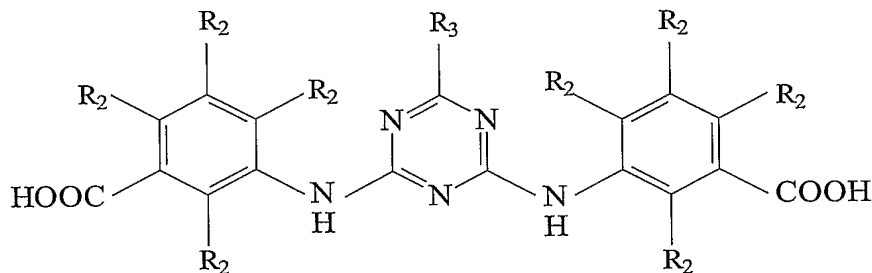
21. A method for preparing a bioactive composition according to claim 20, wherein the  
 bioactive compound is a drug.

22. A method for increasing the solubility of a bioactive compound in a bioactive  
 composition comprising:

- (a) providing a bioactive compound;  
 (b) providing a triazine compound comprising:



or



wherein each R<sub>2</sub> is independently selected from any electron donating  
 group, electron withdrawing group and electron neutral group; and

R<sub>3</sub> is selected from the group consisting of substituted heteroaromatic rings,

unsubstituted heteroaromatic rings, substituted heterocyclic rings, and unsubstituted heterocyclic rings, that are linked to the triazine group through a nitrogen atom within a ring of R<sub>3</sub>,

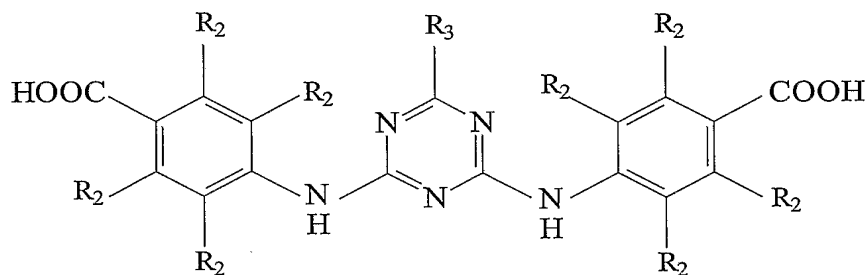
and proton tautomers and salts thereof; and

- (c) combining the bioactive compound, the triazine compound, and a solvent to form a composition characterized in that the amount of bioactive compound dissolvable in the composition is greater than the amount of bioactive compound dissolvable in the same composition not containing the triazine compound.

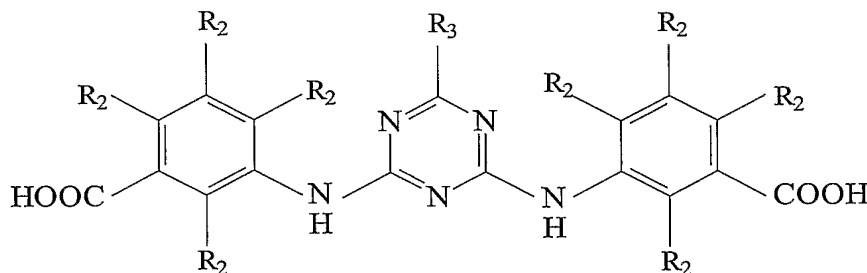
23. A method for increasing the solubility of a bioactive compound in a bioactive composition according to claim 22, wherein the ratio of the amount of bioactive compound dissolvable in the dosage form to the amount of bioactive compound dissolvable in the same composition not containing the triazine compound is greater than 2:1.

24. A method for increasing the stability of a bioactive compound in a bioactive composition comprising:

- (a) providing a bioactive compound;  
(b) providing a triazine compound comprising:



or



wherein each R<sub>2</sub> is independently selected from any electron donating group, electron withdrawing group and electron neutral group; and R<sub>3</sub> is selected from the group consisting of substituted heteroaromatic rings,

unsubstituted heteroaromatic rings, substituted heterocyclic rings, and  
unsubstituted heterocyclic rings, that are linked to the triazine group through a  
nitrogen atom within a ring of R<sub>3</sub>,  
and proton tautomers and salts thereof; and

5 (c) combining the bioactive compound, the triazine compound, and a solvent to form a  
bioactive composition characterized in that the stability of the bioactive compound  
in the composition is greater than the stability of the bioactive compound in the  
same composition not containing the triazine compound.

10 25. A method for increasing the stability of a bioactive compound in a bioactive  
composition according to claim 24, wherein the stability of the bioactive compound in  
the composition is characterized by the reduction in amount of bioactive compound  
over time, and where said reduction in amount of bioactive compound over time is less  
than the reduction in amount of bioactive compound over time in the same  
composition not containing the triazine compound.

15 26. A method for increasing the stability of a bioactive compound in a bioactive  
composition according to claim 25, wherein the reduction in amount of bioactive  
compound over time in the composition is measured after storage at conditions of  
25°C/60% RH for 3 months.

20 27. A method for increasing the stability of a bioactive compound in a bioactive  
composition according to claim 25, wherein the reduction in amount of bioactive  
compound over time in the composition is measured after storage at conditions of  
40°C/75% RH for 3 months.

28. A method for drug delivery comprising:

(a) providing a bioactive composition according to claim 9;

25 (b) delivering the bioactive composition to an organism; and

(c) allowing the bioactive composition to remain in contact with a portion of the  
organism for a period of time sufficient to provide a therapeutic effect resulting  
from delivery of the active agent.

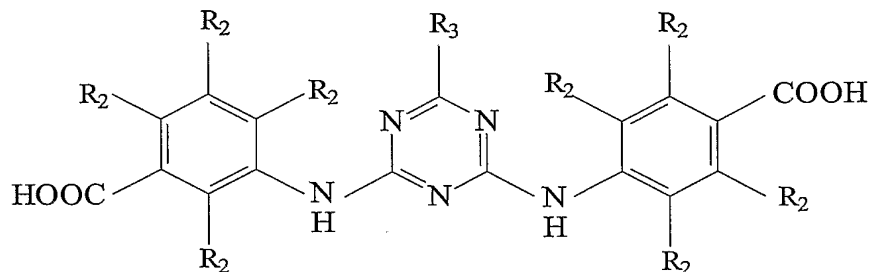
30 29. A method for drug delivery according to claim 28, wherein the bioactive composition  
is delivered to an animal orally.

30. A method for drug delivery according to claim 28, wherein the bioactive composition  
is delivered to an animal by intravenous or intramuscular injection.

31. A bioactive composition comprising:

a bioactive compound, and

a triazine compound comprising:



wherein each  $R_2$  is independently selected from any electron donating group, electron withdrawing group and electron neutral group; and

$R_3$  is selected from the group consisting of substituted heteroaromatic rings, unsubstituted heteroaromatic rings, substituted heterocyclic rings, and unsubstituted heterocyclic rings, that are linked to the triazine group through a nitrogen atom within a ring of  $R_3$ ,

and proton tautomers and salts thereof.